1. **What is and Why NoSQL**

**NoSQL** database technology is a database type that stores information in JSON documents instead of columns and rows used by relational databases. Consequently, **NoSQL** databases are built to be flexible, scalable, and capable of rapidly responding to the data management demands of modern businesses.

1. **NoSQL characteristics**

Multi-Model. Where relational databases require data to be put into tables and columns to be accessed and analyzed, the various data model capabilities of **NoSQL** databases make them extremely flexible when it comes to handling data. ...

Easily Scalable. ...

Flexible. ...

Distributed. ...

Zero Downtime.

1. **NoSQL databases types**

There are four big NoSQL types: **key-value store**, **document store**, column-oriented database, and graph database. Each type solves a problem that can't be solved with relational databases. Actual implementations are often combinations of these.

1. **What is ACID  theorem**

In computer science, **ACID** (atomicity, consistency, isolation, durability) is a set of properties of database transactions intended to guarantee data validity despite errors, power failures, and other mishaps.

1. **What is CAP theorem**

The CAP or CDP theorem, also known as Brewer's theorem, says that it is ... with CAP, and Yahoo's little known NoSQL system [archive] by Daniel Abadi. (en) CAP theorem, almost 2 decades later [archive] by Eric Brewer.

1. NoSQL advantages

* Handle large volumes of data at high speed with a scale-out architecture.
* Store unstuctured, semi-structured, or structured data.
* Enable easy updates to schemas and fields.
* Be developer-friendly.
* Take full **advantage** of the cloud to deliver zero downtime.